

Title (en)

Control system of air conditioner and method of producing control system thereof

Title (de)

Klimaanlagensteuerung und deren Herstellungsverfahren

Title (fr)

Système de commande pour dispositif de climatisation et procédé pour produire ce système

Publication

EP 0909927 A3 20011114 (EN)

Application

EP 98308410 A 19981015

Priority

JP 28237497 A 19971015

Abstract (en)

[origin: EP0909927A2] In a control system, single cycle-controlling PC board is mounted on a housing. The single cycle-controlling PC board is selected from cycle-controlling PC boards previously produced according to refrigerant flow paths in the refrigerant cycle, respectively. Each of the cycle-controlling PC boards has a sensor circuit for reading a detected signal of a sensor for detecting a temperature of a heat exchanger and a valve control circuit for operating a switch control of a switching valve and an opening control of an expansion valve according to corresponding one of the refrigerant flow paths. Single motor-controlling PC board is mounted on the housing. The motor-controlling PC board is selected from motor-controlling PC boards previously produced according to air conditioning abilities and inputted power supply voltages, respectively. Each of the motor-controlling PC boards has a motor control circuit for controlling a rotational frequency of a compressor motor and a speed of rotation of an outdoor fan according to corresponding one pair of the air conditioning abilities and the inputted power voltages. Communication circuit electrically connects the one cycle-controlling PC board and the one motor-controlling PC board so as to communicate signals to each other. <IMAGE>

IPC 1-7

F24F 11/00; **F24F 11/02**

IPC 8 full level

F24F 11/02 (2006.01); **F24F 11/00** (2006.01)

CPC (source: EP KR US)

F24F 11/70 (2017.12 - EP); **F24F 11/84** (2017.12 - EP KR US); **F24F 11/86** (2017.12 - EP KR US); **F24F 11/871** (2017.12 - EP KR US); **F24F 11/88** (2017.12 - EP KR US); **F24F 13/20** (2013.01 - KR); **F24F 2013/207** (2013.01 - KR)

Citation (search report)

- [A] "Toshiba Service Manual Air Conditioner Outdoor Units Type MAR-M81HTM8-E Multi Controllers Type RBM-Y1032E", August 1997, TOSHIBA, XP002177811
- [A] PATENT ABSTRACTS OF JAPAN vol. 1995, no. 09 31 October 1995 (1995-10-31)
- [A] PATENT ABSTRACTS OF JAPAN vol. 018, no. 569 (M - 1695) 31 October 1994 (1994-10-31)
- [A] PATENT ABSTRACTS OF JAPAN vol. 018, no. 196 (M - 1589) 6 April 1994 (1994-04-06)

Cited by

EP3944448A1; US7360638B2; WO2006017617A3

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